1. (amended) In a method which calls for administration of IFN-α to a subject, the improvement comprising co-administering an effective amount of an isolated immunostimulatory nucleic acid, wherein said isolated immunostimulatory nucleic acid is at least 8 nucleotides long and comprises a poly-G sequence at each end and a central palindromic sequence comprising an unmethylated CpG dinucleotide.

B1

19. (amended) The improvement of claim 1, wherein the immunostimulatory nucleic acid has a sequence selected from the group consisting of

ggGGGACGATCGTCgggggG	ODN 2216	SEQ ID NO:7
ggGGGACGATATCGTCgggggG	ODN 2245	SEQ ID NO:9
ggGGGACGAGCTCGTCgggggG	ODN 2247	SEQ ID NO:11
ggGGGACGATCGTTGgggggG	ODN 2252	SEQ ID NO:13
ggGGTCACCGGTGAgggggG	ODN 2300	SEQ ID NO:24
ggGGTCGACGTACGTCGAgggggG	ODN 2301	SEQ ID NO:25
ggGGACGTCGACGTggggG	ODN 2306	SEQ ID NO:30
ggGTCGTCGACGAgggggG	ODN 2329	SEQ ID NO:33
ggGGTCGACGTCGACGTCGAGgggggG	ODN 2334	SEQ ID NO:36, and
ggGGACGACGTCGTGgggggG	ODN 2336	SEQ ID NO:37,

B2

wherein each lower case letter represents phosphorothioate linkage and each upper case letter indicates phosphodiester linkage.

24. (amended) A method of supplementing IFN-α treatment of a subject, comprising administering to a subject in need of IFN-α treatment an effective amount of IFN-α and an isolated immunostimulatory nucleic acid, wherein said isolated immunostimulatory nucleic acid is at least 8 nucleotides long and comprises a poly-G sequence at each end and a central palindromic sequence comprising an unmethylated CpG dinucleotide.

B3

65. (amended) A method of increasing efficacy of IFN-α treatment of a subject, comprising:

B4

administering to a subject in need of treatment with IFN-α a pharmaceutical composition comprising IFN-α, and

coadministering to the subject in need of such treatment a pharmaceutical composition comprising an immunostimulatory nucleic acid in an amount which, together with the administered IFN-α, is an effective IFN-α treatment, wherein the efficacy of the IFN-α treatment is greater than the efficacy of administering the same amount of IFN-α in the absence of coadministering the immunostimulatory nucleic acid, and wherein said immunostimulatory nucleic acid is at least 8 nucleotides long and comprises a poly-G sequence at each end and a central palindromic sequence comprising an unmethylated CpG dinucleotide.

B4 cont.

82. (amended) A method of decreasing a dose of IFN-α effective for treating a subject, comprising:

B5

administering to a subject in need of treatment with IFN-α a pharmaceutical composition comprising IFN-α, and

coadministering to the subject in need of such treatment a pharmaceutical composition comprising an immunostimulatory nucleic acid in an amount which, together with the administered IFN-α, is an effective IFN-α treatment, wherein the amount of administered IFN-α is less than an amount of IFN-α required in the absence of coadministering the immunostimulatory nucleic acid, and wherein said immunostimulatory nucleic acid is at least 8 nucleotides long and comprises a poly-G sequence at each end and a central palindromic sequence comprising an unmethylated CpG dinucleotide.

103. (amended) A method of reducing an IFN-α treatment-related side effect in a subject receiving or in need of treatment with IFN-α, comprising

B6

administering to a subject in need of treatment with IFN-α a pharmaceutical composition comprising IFN-α, and

coadministering to the subject in need of such treatment a pharmaceutical composition comprising an immunostimulatory nucleic acid in an amount which, together with the administered IFN-α, is an effective IFN-α treatment, wherein an IFN-α treatment-related

side effect is reduced in comparison to the side effect when IFN-α is administered in the absence of coadministering the immunostimulatory nucleic acid, and wherein said immunostimulatory nucleic acid is at least 8 nucleotides long and comprises a poly-G sequence at each end and a central palindromic sequence comprising an unmethylated CpG dinucleotide.

176. (amended) A method of stimulating production of a plurality of type I interferon (IFN) subtypes, comprising contacting type I interferon producing cells (IPCs) with an amount of immunostimulatory nucleic acid effective to induce secretion of at least two type I interferons, wherein said immunostimulatory nucleic acid is at least 8 nucleotides long and comprises a poly-G sequence at each end and a central palindromic sequence comprising an unmethylated CpG dinucleotide.

199. (amended) A method of inhibiting IL-12 production, comprising contacting IL-12-producing cells, in the presence of interferon-producing cells under conditions in which the IL-12-producing cells normally produce IL-12, with an immunostimulatory nucleic acid in an amount effective for inducing secretion of type I interferon, wherein said immunostimulatory nucleic acid is at least 8 nucleotides long and comprises a poly-G sequence at each end and a central palindromic sequence comprising an unmethylated CpG dinucleotide.

202. (amended) A pharmaceutical composition, comprising an isolated nucleic acid having a sequence selected from the group consisting of:

ggGGGACGATCGTCgggggG	ODN 2216	SEQ ID NO:7
ggGGGACGATATCGTCgggggG	ODN 2245	SEQ ID NO:9
ggGGGACGAGCTCGTCgggggG	ODN 2247	SEQ ID NO:11
ggGGGACGATCGTTGgggggG	ODN 2252	SEQ ID NO:13
ggGGTCACCGGTGAgggggG	ODN 2300	SEQ ID NO:24
ggGGTCGACGTACGTCGAgggggG	ODN 2301	SEQ ID NO:25
ggGGACGTCGACGTggggG	ODN 2306	SEQ ID NO:30
ggGTCGTCGACGAgggggggG	ODN 2329	SEQ ID NO:33
ggGGTCGACGTCGACGTCGAGgggggG	ODN 2334	SEQ ID NO:36, and